

PROJECT DESCRIPTION

GENERAL

THESE INTERSECTION IMPROVEMENTS INCLUDE ADDING ONE THROUGH LANE ON NORTHBOUND MD 355 AND ONE THROUGH LANE ON WESTBOUND SHADY GROVE ROAD, CHANGING THE EASTBOUND THROUGH LANE TO BE A RIGHT TURN ONLY LANE IN THE AM PEAK PERIOD AND TO BE A THROUGH/RIGHT TURN LANE IN THE PM PEAK PERIOD, AND INSTALLING PEDESTRIAN SIGNALS AND CROSSWALKS. MD 355 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE EXISTING PHASING, CABINET AND CONTROLLER ARE TO BE UTILIZED.
THIS INTERSECTION CURRENTLY OPERATES IN A SEMI-ACTUATED MODE WITH EASTBOUND/WESTBOUND, SHADY GROVE ROAD SPLIT-PHASED.

PROJECT CONTACTS

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EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

QUANTITY	UNIT	DESCRIPTION
8	SF	SHEET ALUMINUM SIGN TO CONSIST OF: - 1 EA D3-2 (VAR. x 16") - "Shady Grove RD" DUAL-FACE- MAST ARM MOUNT

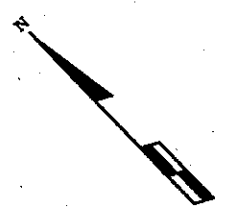
EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

QUANTITY	UNIT	DESCRIPTION
1	C.Y.	TEST PIT EXCAVATION
5	C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
25	LF	FURNISH AND INSTALL 4 IN. (SCHEDULE 80) PVC CONDUIT - TRENCHED
17	EA	FURNISH AND INSTALL TRAFFIC SIGNAL HEAD, 12 IN. SECTION - MAST ARM MOUNT
4	EA	FURNISH AND INSTALL PEDESTRIAN SIGNAL HEAD, 12 IN. SECTION - POLE MOUNT
2	EA	FURNISH AND INSTALL HANDHOLE
1	EA	FURNISH AND INSTALL 27 FT. STEEL MAST ARM POLE AND 70 FT. MAST ARM (BLACK - FEDERAL SPECIFICATION NUMBER 17038)
1	EA	FURNISH AND INSTALL 250 WATT HPS LAMP AND LUMINAIRE (BLACK - FEDERAL SPECIFICATION NUMBER 17038)
1	EA	FURNISH AND INSTALL 20 FT. LIGHTING BRACKET FOR TRAFFIC SIGNAL STRUCTURE (BLACK - FEDERAL SPECIFICATION NUMBER 17038)
1	EA	FURNISH AND INSTALL PEDESTRIAN PUSHBUTTONS AND RIO-4(I) SIGN PUSH BUTTON TO CROSS (FREDERICK ROAD)
90	LF	24 IN. WHITE TEMPORARY PREFORMED PAVEMENT MARKING TAPE
2	EA	FURNISH AND INSTALL DETECTOR CAMERA EQUIPMENT
1000	LF	FURNISH AND INSTALL COAXIAL CABLE AND 5 CONDUCTOR - NO.18 AWG CABLE @ 500 L.F. PER CABLE PER UNIT.
2	EA	FURNISH AND INSTALL PEDESTRIAN PUSHBUTTONS AND RIO-4(I) SING PUSHBUTTON TO CROSS (SHADY GROVE ROAD)
3	EA	ADJUST HANDHOLE

• NOTE: ALL SIGNAL POLE STRUCTURES, LIGHTING ARMS, LUMINAIRES AND SIGNAL FACES SHALL BE BLACK IN COLOR (FEDERAL SPECIFICATION NUMBER 17038)

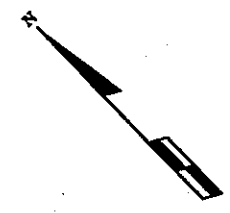
PHASING CHART

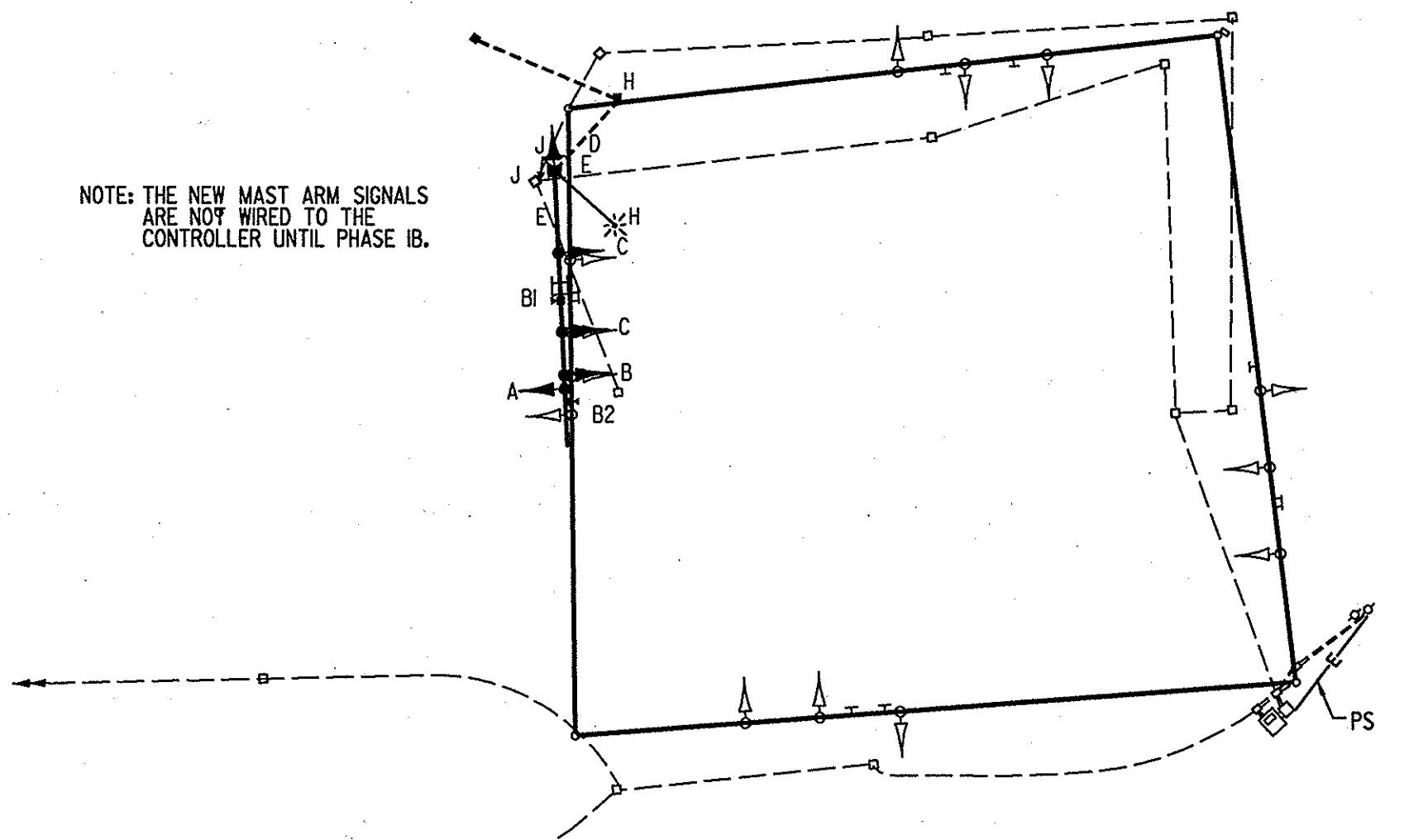


	1	2	3	4	5	6	7	8	9	10	11	12	13	
PHASE 1 & 5	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
1 & 5 CHANGE	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
PHASE 2 & 5	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
2 & 5 CHANGE	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
PHASE 2 & 6	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
2 & 6 CHANGE	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
PHASE 3	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
3 CHANGE	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
PHASE 4	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
4 CHANGE	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G	⊕ R ⊖ Y ⊕ G
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

EXISTING OPERATION SHALL BE UTILIZED

WIRING DIAGRAM





NOTE: THE NEW MAST ARM SIGNALS ARE NOW WIRED TO THE CONTROLLER UNTIL PHASE 1B.

WIRING KEY

A

- 7-CONDUCTOR NO.14 A.W.G.

B, C, D, E

- 5-CONDUCTOR NO.14 A.W.G.

H

- 2-CONDUCTOR NO.12 A.W.G. TRAY CABLE

J

- 3-CONDUCTOR NO.18 A.W.G. (PUSHBUTTON)


BI, B2

- VIDEO CAMERA CABLE (INCLUDES COAXIAL CABLE AND 5-CONDUCTOR NO.18 A.W.G.)

NOTE: ALL EXISTING WIRING REMAINS UNCHANGED IN PHASE 1A

PS - POWER SERVICE

MAINTENANCE OF TRAFFIC SIGNAL - PHASE 1A

 MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION PLAN

MD 355 AND SHADY GROVE ROAD

DRAWN BY: _____

CHECKED BY: _____

SCALE: _____

DATE: _____

F.A.P. NO. _____

S.H.A. NO. _____

COUNTY: MONTGOMERY

LOG MILE: 150355/2.73

NO. GI 2382- @

T.I.M.S. NO. C-895

SHEET NO. 33 OF 55

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